

Amendments to the Specification:

Please replace the paragraph between page 7, line 12 and page 8, line 4 with the following amended paragraph:

Figs. 1(a) and 1(b) are block diagrams of a DSSS/CCK communication system which, for example, may be employed in an IEEE 802.11b wireless LAN. As shown in Fig. 1(a), source bits in a data packet are first scrambled by a scrambler 1 and grouped into the k th 8-bit block 2 ($b(k) = \{b_0(k), b_1(k), \dots, b_7(k)\}$) at time k ($k = 0, 1, \dots, K-1$). Then, the first bit pair ($b_0(k), b_1(k)$) is mapped to a differentially encoded phase angle $\phi_1(k)$ based on a DQPSK encoder 31 and the other bit pairs ($b_2(k), b_3(k)$), ($b_4(k), b_5(k)$), and ($b_6(k), b_7(k)$) are respectively mapped to $\phi_2(k), \phi_3(k)$, and ϕ_4 based on a natural QPSK encoding in encoders 32, 33, and 34. Note that each of the four angles can take a value in the set of $\{0, \pi/2, \pi, 3\pi/2\}$. Among the four angles, the naturally encoded angles $\phi_2(k), \phi_3$, and ϕ_4 are used to generate one of 64 base CCK codewords $c(k) = (c_0(k), c_1(k), \dots, c_7(k))$ in selector 4 according to the following equation:

$$\mathbf{c}(k) = (e^{j(\phi_2(k)+\phi_3(k)+\phi_4(k))}, e^{j(\phi_3(k)+\phi_4(k))}, e^{j(\phi_2(k)+\phi_4(k))}, -e^{j\phi_4(k)}, e^{j(\phi_2(k)+\phi_3(k))}, e^{j\phi_3(k)}, -e^{j\phi_2(k)}, 1), \quad (1)$$